

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (Currently Amended) A system for compensating for timing violations of time restricted data being transmitted over a bursty communication channel, the system comprising:
 - a retriever, coupled to a buffer, for retrieving the time restricted data from the buffer, at a retrieval rate;
 - a buffer level monitor, coupled to the buffer, for monitoring the level of time restricted data in the buffer at a monitoring rate; and
 - a controller coupled to the buffer level monitor and to the retriever, for setting the retrieval rate according to an estimated time between desired arrival times of two successive packets of the time restricted data and the monitoring rate.
2. (Original) The system according to claim 1, wherein the controller sets the retrieval rate and the monitoring rate, according to the level of the time restricted data in the buffer.
3. (Original) The system according to claim 1, wherein the retrieval rate is increased when the difference between the level of the time restricted data in the buffer and a predefined threshold level exceeds a predefined difference threshold.
4. (Original) The system according to claim 1 wherein the retrieval rate being responsive to the difference between the level of the time restricted data in the buffer and a predefined threshold level.

5. (Original) The system according to claim 1 wherein the retrieval rate and the monitoring rate are responsive to a difference between the buffer behavior pattern to a predefined buffer behavior pattern.
6. (Original) The system of claim 1 wherein the retrieval rate and the monitoring rate are responsive to low frequency changes in the level of time restricted data in the buffer.
7. (Original) The system of claim 1 wherein the controller is configured to change the monitoring rate and the retrieval rate to compensate for jitter included in the time-restricted data.
8. (Original) The system of claim 1 wherein the removal interval is responsive to a current bit rate of the time restricted data.
9. (Original) The system of claim 1 wherein the controller sets the monitoring rate in response to the level of jitter included in the time restricted data.
10. (Original) The system of claim 1 wherein the monitoring rate and the retrieval rate are set in view of a statistical analysis of the level of time restricted data in the buffer.
11. (Original) The system of claim 1 wherein the controller is configured to set the monitoring rate in response to changes in the bit rate of arriving time-restricted data.
12. (Original) The system according to claim 1, wherein the controller modifies the retrieval rate, when said controller detects that the behavior of said current level exceeds a given behavior and adjusts said retrieval rate accordingly.

13. (Original) The system according to claim 1, wherein said buffer is a first in first out buffer.

14. (Original) The system according to claim 1 wherein the time restricted data is in a form of MPEG Transport packet.

15. (Original) The system according to claim 1 wherein the type of said bursty communication channel is selected from the list consisting of:

Ethernet;

Fast Ethernet;

Gigabit Ethernet;

TCP/IP;

RTP; and

UDP/IP.

16. (Original) The system of claim 1 wherein the timing violations are selected from the group consisting of:

delay; and

Jitter.

17. (Currently Amended) A system for transferring time restricted data over a jitter including channel, the system comprising:

a retriever, coupled to a buffer, for retrieving the time restricted data from the buffer, at a retrieval rate;

a buffer level monitor, coupled to the buffer, for monitoring the level of time restricted data in the buffer at a monitoring rate; and

a controller coupled to the buffer level monitor and to the retriever, for setting the retrieval rate according to an estimated time between desired arrival times of two successive packets of the time restricted data and the monitoring rate.

18. (Original) The system of claim 15 further comprising at least one entity selected from the group consisting of :

a decapsulator, connected to said buffer, wherein said decapsulator extracts said time restricted data from bursty channel format packets and wherein said decapsulator, provides said time restricted data to said buffer;

a receiving end communication interface, connected to said decapsulator, wherein said receiving end communication interface receives said bursty channel format packets from said bursty communication channel, and wherein said receiving end communication interface provides said bursty channel format packets to said decapsulator;

a transmitting end communication interface, for transmitting said bursty channel format packets to said receiving end communication interface over said bursty communication channel;

an encapsulator, connected to said transmitting end communication interface, for encapsulating said time restricted data in said bursty channel format packets;

a time restricted data source, connected to said encapsulator; and

a communication unit, coupled to the retriever;

19. (Original) The system according to claim 15, wherein said retriever is further connected to a communication unit selected from the list consisting of:

a decoder, for decoding said time restricted data;

a transmitter, for transmitting said time restricted data to a remote receiver; and

a multiplexer, for multiplexing said time restricted data.

20. (Original) The system according to claim 19, wherein said multiplexer is further connected to said transmitter, and wherein said transmitter transmits multiplexed time restricted data received from said multiplexer.

21 - 58. (Withdrawn)

59. (Currently Amended) Method for controlling a buffer containing time restricted data received over a bursty communication channel, the method comprising the steps of:

setting a time interval between sequential retrievals of time restricted data from a buffer according to an estimated time between desired arrival times of two successive packets of the time restricted data and a monitoring time at which the buffer level of said time restricted data in said buffer is to be monitored;

monitoring said buffer level at said monitoring time;

increasing said interval when said buffer level is lower than an upper threshold;

and

decreasing said interval when said buffer level is lower than a lower threshold.

60. (Original) The method according to claim 59, further comprising a step of setting said monitoring time after said step of increasing, after said step of decreasing, and when said buffer level is equal to said threshold.

61. (Original) The method according to claim 59, further comprising a preliminary step of detecting if said buffer level exceeds a predetermined zero level.